

Implicit Writing Beliefs and their Relation to the Quality of Literature-related Argumentative Writing among High School Students

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Abstract

Implicit beliefs play an important role in one's behavior and influence how that individual acquires and demonstrates knowledge (Bandura, 1986). The present study explored whether two implicit writing beliefs (transaction and transmission) would independently predict the quality of literature related argumentative writing among high school students. 224 high school students participated in the study. Initially, participants implicit writing beliefs were assessed. This was followed by administering a literature related argumentative writing task. The argumentative essays were scored by using a rubric adapted from Marshall's (1987) studies of literary understanding and theories of argumentation (Toulmin, 1958). Using multiple regression, it was found that both the beliefs played unique but contrasting roles in predicting student's literature related argumentation and thus, should be considered when teaching argumentative writing.

Implications and future research directions are discussed.

Keywords: Literary argumentation, beliefs about writing, transmission, transaction, literature-related argumentative writing

Introduction

Argumentative writing is a salient aspect of academic writing that is valued in various educational and professional roles (Liu & Stapleton, 2014; Qin & Karabacak, 2010). It can be used to serve various functions, including consulting, negotiation, persuasion, debating and conflict resolution (Ferretti & Fan, 2016). It is considered as a purposeful skill required to accomplish and communicate meaningful disciplinary research and findings (Goldman, Britt, Cribb, George, Greenleaf, Lee & Shanahan, 2016).

Since argumentative writing is an important skill, there has been a huge body of literature exploring the instructional and social processes that occur in a classroom, which create a context for students to develop expertise in argumentation (Applebee et al., 2003; Morris et al., 2018; Nystrand et al., 2003; Hillocks, 2005, 2010). However, research has shown that the effectiveness of argumentative instruction may be contingent upon students' implicit belief systems about reading and writing. According to social learning theories, there are various factors that influence an individual's behavior, including personal, motivational and cognitive factors (Bandura, 1986). Motivational factors such as implicit beliefs play an important role in one's behavior and influences how that individual acquires and demonstrates knowledge.

Schraw and Bruning (1999) and White and Bruning (2005) have identified two types of implicit beliefs which have shown to influence one's quality of writing. One is transaction beliefs and the other is transmission beliefs. *Transaction beliefs* about writing emphasize the active role of the reader/writer in the construction of meaning. *Transmission beliefs* about writing, on the other hand emphasize that meaning must be transmitted from the author (or the text) to the reader. Research has shown that these two types of beliefs orthogonally relate to each other (Mateos et al., 2011), suggesting that each of the beliefs can independently shape students'

understanding of their roles as a writer. This in turn would influence the way the students orient themselves to approach various writing tasks.

The significance of such implicit beliefs, specifically implicit writing beliefs in influencing quality of writing among university level students has been repeatedly established (White & Bruning, 2005; Baaijen, Galbraithb & de Glopper, 2014; Cuevas et al., 2016).

However, there is little understanding of how of this relation operates in the school context, where students are still in their formative years and their beliefs are malleable to change (Bandura, 1986). Moreover, previous research has not explored quality of writing as ‘disciplinary related argumentation’-a salient aspect of academic writing and a skill that is valuable at the college and career level (Goldman et al., 2016). Although it is common to develop an argument with a claim, evidence and warrant across disciplines, the nature of argumentation greatly differs. Goldman, et al (2016) successfully brings out this difference across literature, science and history. In literature, argumentation involves open dialogues between the reader and texts that leads to varied interpretations, whereas in science, it involves problem solving with providing authentic explanations for naturally occurring phenomena. The purpose of the present study was to examine the role of implicit writing beliefs in explaining variance in disciplinary related argumentation- specifically literature related argumentative writing among high school students.

Research Question and Hypotheses

The present study explored the role of two types of implicit writing beliefs, transaction and transmission (Schraw & Bruning, 1999; White & Bruning, 2005). Transaction beliefs emphasize the active role of the writer in the construction of meaning, whereas, transmission beliefs bring out the passive role of the writer, when meaning must be transferred directly from

other sources (such as another author or other texts) to the reader. Students with transaction beliefs generally demonstrate higher levels of affective and cognitive engagement during the writing process in comparison to students with transmission beliefs (White & Bruning, 2005). The present study explored whether the two implicit writing beliefs would have differential impacts on the quality of literature related argumentative writing among high school students. Literature-related argumentative writing was defined as writing that students may employ in taking up a range of different, competing stances or claims provoked by literary experiences. It was hypothesized that students with higher transaction beliefs would obtain higher scores on literature related argumentative writing and students with higher transmission beliefs would obtain lower scores on literature related argumentative writing.

Method

Participants

This cross-sectional study occurred during the piloting phase (Year 3) of a four-year IES Goal 2 Development and Innovation project (school year 2017-2018). The goal of this project was to focus on developing and implementing a principled approach to teaching and learning literature to effectively support high school students' literature-related argumentative writing. Participants included 242 high school students (109 females) in 12 classrooms from 8 schools across 7 school districts in the Midwestern United States. Students primarily came from Grade 9 to 12. Seventy percent ($n = 152$) of the students self-identified as white.

Measures

The Writing Beliefs Inventory. (9 items; White & Bruning, 2005) This inventory was adapted to assess students' beliefs about writing. There were questions on Transmission beliefs and Transaction beliefs. (e.g. transaction belief: "I enjoy interpreting what I read in a personal way" and transmission belief: "People should agree on what a book means"). Confirmatory factor analysis (CFA) models confirmed the two-factor structure for the scale. $\chi^2(26) = 53.00$, $p = .00$, RMSEA = .06, CFI = .94, TLI = .92 for the writer beliefs inventory.

Literature-related argumentative writing. Students were required to read a short fictional narrative ('War' by Pirandello) and respond to a writing prompt that asked students to justify their interpretation of the literary text with a "well-crafted" argument.

Quality of writing. Students' quality of argumentative essays was analyzed by using a rubric adapted from Marshall's (1987) studies of literary understanding and theories of argumentation (Toulmin, 1958). The rubric contained three levels of literary argumentation, namely evaluation, retelling and interpretation. Evaluation refers to the writer's judgement of the quality of the work, character's behavior, idea ("War is always bad.") or author's vision of the world ("The author seems to think that all people are stupid.") without explanation or justification and was considered as an off-task response. Retelling refers to the writer summarizing the text with or without interpretive tags. Depending on the extent to which students' retelling was elaborated by interpretive tags, the retelling level was further classified into three sub-levels, labeled as Level 1 to 3 in the rubric. Interpretation refers to the writer going beyond what is in the text to justify motivations for characters or the meaning of the unfolding plot and to interpret the writer/reader motives (Level 7 and 8). A high-quality literary interpretation contains a sophisticated organizational framework, thematic framing, and multiple

perspectives. Essays that move beyond retelling but do not satisfy the three criteria of interpretation were classified into Level 4, 5, or 6. Details of the rubric are described in Table 1. These three intermediate sub-levels demonstrated the writer's potential to shift their literature-related argumentative writing from retelling to interpretation. Essays were evaluated independently by two professional raters blind to study condition. Adequate inter-rater reliability ($\alpha = .77$) was obtained, and disagreements were resolved through discussions.

Table 1

Scoring Rubric for the Literature-related Argumentative Writing Task

8	7	6	5	4	3	2	1
A sophisticated organizational framework is used to present the main arguments clearly and how the elements of arguments are related to one another. Interpretation and generalization that offers a thematic framing of the story with extensive, warranted and specific support from the text as well as other sources; multiple perspectives are considered; use of elaborated world knowledge and text evidence; may also include counter-claims that anticipate other interpretations.	A sophisticated organizational framework is used to present the main arguments clearly and how the elements of arguments are related to one another. Interpretation with extensive support that is warranted by and explained with elaborated detail from the text; may also include counter-claims that anticipate other interpretations.	An organizational framework is used to present the main arguments clearly and how the elements of arguments are related to one another. Interpretation with extensive support or evidence in the form of quotations or retelling of the story to support a claim.	A weak organizational framework makes it difficult to follow the arguments and how the elements of arguments are related to one another. Interpretation with some support or evidence in the form of quotations or retelling of the story to support a claim.	Lack of an identifiable organizational framework; A series of claims or warrants exists with minimal interpretations.	Retelling with elaborated details from the text with an interpretive tag.	Retelling with more elaborated details from the text.	Retelling with little elaboration.

Data Analysis

A multiple regression analysis was conducted to explain the variance in quality of literature-based argumentation from the two kinds of implicit writing beliefs. The predictors of interest were transmission and transaction beliefs. In the regression model, gender and grade (9 to 12) was controlled for.

Results

Results from the multiple regression analysis can be found in Table 2. It was found that all the predictors (gender, grade, transaction and transmission beliefs) explained 24.8% variance in literature related argumentative writing ($F(5,195) = 12.83, p < .001$). After controlling for grade and gender, transaction and transmission beliefs significantly predicted literature related argumentative writing among high school students. As predicted by the hypotheses, students with higher transaction beliefs obtained higher scores on literature related argumentation ($\hat{\beta} = .381, SE = .157, p = .016$) and students with higher transmission beliefs obtained lower scores on literature related argumentation ($\hat{\beta} = -.479, SE = .143, p = .001$). There was no significant interaction effect between transmission and transaction beliefs.

Table 2

Multiple Regression Analysis showing the relationship between Implicit Writing Beliefs and Literature-related Argumentative Writing

	<i>Beta Value</i>	<i>Standard Error</i>	<i>Significance</i>
Transmission Beliefs	-.479	.143	.001
Transaction Beliefs	.381	.157	.016

Discussion

The present study explored whether the two implicit writing beliefs (transaction and transmission) would have differential impacts on the quality of literature related argumentative writing among high school students. Literature-related argumentative writing was defined as writing that students may employ in taking up a range of different, competing stances or claims provoked by literary experiences. Based on prior research (White & Bruning, 2005), it was hypothesized that students with higher transaction beliefs would obtain higher scores on literature related argumentative writing and students with higher transmission beliefs would obtain lower scores on literature related argumentative writing. Overall, the results support both the hypotheses, after controlling for gender and grade level.

Individuals who held higher transmission beliefs, who thought writing is a passive process obtained lower scores on literature related argumentation. This finding goes in line with White and Bruning's (2005) study where they found higher transmission beliefs to be associated with poor quality of writing. This could be because such individuals may approach writing tasks in ways that does not provide an opportunity to integrate critical content and personal ideas when

generating text. Individuals who held higher transaction beliefs on the other hand, obtained higher scores on literature related argumentative writing. This finding also goes in line with White and Bruning's (2005) study where transaction beliefs was positively related to quality of writing. Possible explanations for this could include individuals with such an orientation would be more affectively and cognitively engaged or involved with the text and would experience happiness while being able to express oneself through writing.

The present study also explored if both these implicit beliefs would interact and influence quality of writing, given the uncorrelated nature of the beliefs. However, there was no significant interaction effect. One possible reason is that our method had relatively low power. With a limited sample size and no control condition, it is difficult to examine the actual influence of these implicit beliefs.

Conclusions and Implications

It was proposed that implicit writing beliefs would influence writers' quality of writing and the present study brought out its significance in explaining variance in literature related argumentation, even at the school level. Moreover, it was found that transaction beliefs play an important role in predicting higher scores on literature related argumentation. Thus, instructors can use more transactive approaches when teaching writing. They can begin by exploring the kind of implicit beliefs that young students hold when teaching writing at schools. And then encourage their students to take an active role in meaning making, while being affectively and cognitively invested in the writing process. This could also help students in feeling more competent and motivated when it comes to their writing (White & Bruning, 2005). Argumentative writing is a skill valued in higher education and work places, and hence, it is essential that children learn to be involved in this writing process, from a young age.

Limitations and Future Directions

The major limitation of the study is the correlational design employed. One cannot draw causal conclusions about the effects of implicit writing beliefs on quality of literature related argumentative writing among high school students. Moreover, there could have been many other variables which could have had an influence on quality of writing, which were not controlled for. Examples: level of motivation, prior level of writing, nature of the writing task and so on.

Future studies can further explore causal pathways between implicit writing beliefs and quality of writing by using experimental/quasi experimental designs. They can also identify instructional approaches to enhance transaction beliefs and reduce transmission beliefs among students and explore its effectiveness in enhancing the quality of argumentative writing. The presence of control groups can help understand the effectiveness of such interventions. Moreover, future studies can also explore the role of implicit beliefs in various forms of writing, other than argumentation.

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